BAG WITH SHOULDER STRAPS AND WAIST/HIP SUPPORT MEMBER

Related Applications

This application is a continuation-in-part application of the following co-pending U.S. patent applications, the entire disclosures of which are considered as being part of the disclosure of this application and are hereby incorporated herein by reference: U.S. Patent Application Serial No. 10/610,058 filed on June 30, 2003; U.S. Patent Application Serial No. 10/706,259 filed on November 12, 2003; U.S. Patent Application Serial No. 10/767,475 filed on January 28, 2004; and U.S. Application Serial No. 10/767,482 filed on January 28, 2004.

Field of the Invention

This invention relates to a bag or pack adapted to be suspended and carried in an over-the-back relationship and, more particularly, to a pack incorporating shoulder straps and a waist/hip support and weight redistribution member.

Background of the Invention

Bags adapted for storing and carrying items such as, for example, lap top computers, files, books and the like have been in widespread use for many years. These bags most commonly incorporate a handle which allows the bag to be carried by hand and most typically a single strap which allows a user to suspend the bag from his/her shoulder.

Carrying a bag by hand, of course, restricts a user's ability to use his/her arm and hand for other functions. This is particularly disadvantageous for example where the user has more than two bags to carry as is most commonly the case where the user is a business traveler. Suspending the bag from one of the user's shoulders, while offering the advantage of freeing the user's hands for other uses, has the disadvantage of concentrating all of the weight of the bag from one shoulder which is uncomfortable, stressful to the shoulder, and increases the risk of injury to the shoulder.

This invention is directed to a bag adapted to overcome the disadvantages associated with both hand held bags and bags which are suspended from only one of the shoulders of the user.

Summary of the Invention

The present invention is directed to a bag including an upper longitudinal edge and comprising a support member including a pair of spaced-apart arms adapted to extend generally outwardly from the upper longitudinal edge and rest against the respective opposed sides of the waist of the wearer.

In one embodiment, the bag includes a front face which incorporates the upper longitudinal edge and the arms are adapted to extend generally outwardly from the front face of the bag. In one embodiment, the arms of the support member are rotatable about the front face of the bag between a first position wherein the arms are disposed adjacent the front face to a second position wherein the arms are disposed in an orientation generally normal to the front face of the bag.

Further, in one embodiment, a collar interconnects the arms and the bag incorporates a sleeve extending along the upper longitudinal edge of the front face of the bag. The collar of the support member extends through the sleeve and is rotatable therein.

In one embodiment, the collar of the support member defines a hollow elongate tube including open opposed ends and each of the arms includes a shoulder adapted for extension and securement into the opposed ends respectively of the tube. In one embodiment, the collar has a pair of threaded ends adapted to receive end caps respectively and the collar further comprises respective washers adapted to be positioned in the interior of the collar between the shoulders of the arms and the collar respectively. The end caps are threadable over the ends of the collar respectively for securing the shoulders of the arms of the support member within the collar.

In one embodiment, the sleeve associated with the bag is defined by two or more slits formed in the front face of the bag and the bag further includes a

flap associated with the front face and adapted to be wrapped around and cover the collar.

In another embodiment, the support member comprises a clip which has been bent so as to define the arms and the collar extends unitarily therebetween. In still another embodiment, the support member comprises an elongate flexible rod which defines the pair of spaced-apart arms and the arms are adapted to be bent manually into a selected configuration and to retain such bent configuration when released. In these embodiments, the clip or rod respectively may be secured directly to the front face of the bag along the upper longitudinal edge thereof as with rivets or the like.

The present invention is also directed to a double shoulder suspension assembly for the bag including a pair of side strap members extending upwardly from opposed ends of the outer surface of the bag and converging into a center strap member extending downwardly into engagement with the handle of the bag. The center strap member has one end secured to the handle and further comprises a pair of straps extending upwardly from the end secured to the handle into each respective shoulder strap.

In one embodiment, the center strap member defines an eyelet and a strip of material such as, for example, a strip of hook and loop type material is adapted to be wrapped around the handle and the eyelet for securing the center strap member to the handle. The center strap member may be disconnected from the handle for converting the shoulder suspension assembly from a two strap/two shoulder assembly into a single strap/single shoulder assembly.

Other advantages and features of the present invention will be more readily apparent from the following detailed description of the preferred embodiments of the invention, the accompanying drawings, and the appended claims.

Brief Description of the Drawings

In the drawings:

FIGURE 1 is a perspective view of a bag incorporating the features of the present invention;

FIGURE 2 is a perspective view of the bag of FIGURE 1 with the arms of the waist/hip support member in their extended, engageable positions;

FIGURE 3 is a perspective view of the waist/hip support member of the bag shown in FIGURE 1;

FIGURE 4 is an exploded perspective view of the bag of FIGURE 1;

FIGURE 5 is a side elevational view depicting the bag of FIGURE 1 suspended in an over-the-back relationship from both shoulders of the user with the waist/hip support member in its disengaged position;

FIGURE 6 and 7 are side and front elevational views respectively depicting the bag of FIGURE 1 suspended in an over-the-back relationship from both shoulders of the user with the arms of the support member in their engaged position against the waist and hips of the user;

FIGURE 8 is an exploded perspective view of another embodiment of the waist/hip support member of the present invention;

FIGURE 9 is an exploded perspective view of the bag of FIGURE 1 including yet another waist/hip support member embodiment;

FIGURE 10 is a broken, vertical cross-sectional view of the sleeve portion of the waist/hip support member of the bag shown in FIGURE 9;

FIGURE 11 is a broken perspective view of another bag embodiment in accordance with the present invention incorporating yet another waist/hip support member embodiment depicted therein with the arms in their extended, engageable positions;

FIGURE 12 is a broken perspective view of the bag of FIGURE 11 with the arms of the waist/hip support member in their disengaged positions;

FIGURE 13 is a broken perspective view of yet another bag embodiment in accordance with the present invention incorporating a flexible core waist/hip support member and depicting the arms thereof in their folded, disengaged positions; and

FIGURE 14 is a broken perspective view of the bag of FIGURE 13 with the arms of the flexible core waist/hip support member in their extended waist/hip engageable positions.

Detailed Description of the Preferred Embodiments

The invention disclosed herein is, of course, susceptible of embodiment in many different forms. Shown in the drawings and described herein below in detail are preferred embodiments of the invention. It is to be understood, however, that the present disclosure is an exemplification of the principles of the invention and does not limit the invention to the illustrated embodiments.

For ease of description, the various embodiment of the bag of the present invention will be described in a normal (upright) carrying position and terms such as upper, lower, horizontal, etc., will be used with reference to this position. It will be understood, however, that the bag of the present invention may be manufactured, stored, transported, used, and sold in an orientation other than the positions shown and described herein.

FIGURES 1-4 depict a bag, pack, or brief case 100 constructed in accordance with the present invention which includes opposed, spaced front and back panels or faces 102 and 104 respectively, opposed and spaced side panels or faces 106 and 108 respectively and top and bottom faces or panels 110 and 112, all together unitarily joined together to define a shell defining a hollow interior for carrying and storing such items as, for example, a lap-top computer, books, files, etc. Although not shown, it is understood that the top panel 110 also defines an access opening into the interior of the bag 100. The bag 100 additionally includes a flap 114 which wraps around and covers the top panel 110. Flap 114 is adapted to be lifted up and away from the top panel 110 in a counter-clockwise direction relative to the back panel 104 to gain access to the opening defined therein. A handle 116 is stitched or otherwise suitably secured to, and is centrally located on, the top face of the flap 114 in the portion thereof overlying the top panel 110 of bag 100.

Bag 100 incorporates a double shoulder suspension assembly 118 comprising a pair of shoulder pads or straps 120 and 122, a pair of side straps 124 and 126 and a center strap 128. Each of the side straps 124 and 126 include a lower end secured to, and extending upwardly from, respective hooks or rings 130 and 132 secured to the outer surface of the side panels 106 and 108 respectively in the region of the upper edge thereof adjacent the top panel 110. The upper end of each

of the side straps 124 and 126 is stitched or otherwise suitably secured to the lower end of each of the respective shoulder pads 120 and 122. Buckles 134 and 136 associated with the straps 124 and 126 respectively are adapted to allow the length of the straps 124 and 126 to be adjusted.

The center strap 128 defines a lower closed end defining an eyelet or through aperture 138 and a pair of strap strips or ears 140 and 142 extending upwardly from the eyelet 138. Each of the strips 140 and 142 defines an upper end opposite the eyelet 138 which is stitched or otherwise suitably secured to the end of each of the shoulder pads or straps 120 and 122 opposite the end thereof secured to straps 124 and 126 respectively.

An elongate strip 143 of hook and loop type material such as Velcro® or another suitable like material is adapted to be wrapped around the handle 116 and extend through the eyelet 138 on center strip 128 for removably securing and attaching the center strap 128 to bag 100. The attachment of center shoulder strap strip 128 to handle 116 creates a generally "M" shaped shoulder suspension assembly 118 including a pair of shoulder straps 120 and 122 adapted to be wrapped around the respective shoulders of a user as shown in FIGURES 1 and 5-7.

The bag 100 additionally defines an upper longitudinal edge 144 on the side of the front panel 102 thereof where two spaced-apart pairs of vertically oriented slits 146 (FIGURE 2) have been cut through the material comprising the bag 100 and, more particularly, cut through the material comprising the flap 114 so as to define a pair of spaced-apart open sleeves 148 and 150 extending along the edge 144 and the flap 114 in a generally horizontal, co-linear spaced-apart relationship.

Bag 100 additionally incorporates a generally "U" shaped waist/hip support member 152 of the type disclosed in, for example, my co-pending U.S. Patent Application Serial No. 10/610,058 filed on June 30, 2003, the description of which is incorporated herein by reference. Member 152 is comprised of collar 154 and arms 156 and 158 (FIGURES 3 and 4) which may be made of aluminum, steel, plastic, composite or a like suitable rigid material.

In the embodiment shown in FIGURES 1-4, support member 152 is tubular. Particularly, collar 154 is in the form of an elongate hollow tube or rod which includes and defines a plurality of through apertures 160. In the embodiment shown, collar 154 includes two spaced-apart sets of five apertures each, the apertures 160 in each of the sets being aligned in spaced-apart and co-linear and horizontal relationship along the length of the collar 154.

Each of the arms 156 and 158 is in the form of an elongate tube or rod which has been bent and shaped in a manner so as to define an elongate extended shoulder 162 and a unitary hip and/or waist engaging segment or portion 164 extending generally normally outwardly from the shoulder 162. The free end 168 of the extended shoulder 162 of each of the arms 156 and 158 incorporates a depressable spring-activated pin, button or the like element 170 adapted to allow the arms 156 and 158 to be removably secured inside the opposite open ends of the collar 154 as described in more detail below.

Preferably, the arms 156 and 158 are mirror images of each other and are disposed generally co-planarly to each other in both the disengaged and engaged positions of the support member 152. Moreover, each of the arms 156 and 158 bend not only inwardly in the direction of the distal ends thereof away from the shoulders thereof but also downwardly in the same direction so as to allow the same to rest and engage against the top of a wearer's hips in their engaged position as described in more detail below.

Each of the arms 156 and 158 have an outside diameter which is slightly less than the inner diameter of the collar 154 to allow the free end 168 of each of the extended shoulders 162 respectively to be advanced into and through the opposed open ends respectively of the collar 154. The arms 156 and 158 are advanced into the hollow collar 154 until the respective pins 170 are locked into one of the selected apertures 160 thereby locking and securing the arms 156 and 158 to the collar 154.

Support member 152 still further comprises a pair of elongate hollow generally cylindrical comfort pads or cushions 170 and 172 adapted to be slid over the respective hip/waist engaging portions 164 of the arms 156 and 158 respectively. The pads or cushions 170 and 172 may be made of any suitable soft,

pliable and/or deformable material. Alternatively, a suitable layer of cushioning material may be applied directly to the surface of the arms by any known process during the manufacture of the member 152.

In accordance with the present invention, collar 154 of support member 152 is adapted to be slid horizontally and longitudinally through the respective sleeves 148 and 150 formed in the front panel 102 and the arms 156 and 158 are secured to the collar 154 as described above thus securing the member 152 to the bag 100.

A cover 190 is associated with and secured to the front panel 102 of bag 100 and is adapted to be wrapped around and cover the exterior of the collar 154 for cushioning the feel of the collar 154 against the back of the user. Specifically, cover 190 comprises a strip of suitable cushioning material 192 which has one longitudinal edge 194 stitched or otherwise suitably secured to the front panel 102 of the bag 100. The strip 192 defines a flap 195 including an interior surface having a strip of hook and loop type material 146 such as Velcro® or a like material secured thereto which is adapted to cooperate and be secured to a like strip of hook and loop type material 148 such as Velcro® or the like material which is secured to the surface of the top panel 110 below the handle 116.

Cover 190 is adapted to be rotated in a clockwise direction from a first orientation wherein cover 190 hangs down against the front panel 102 to a second orientation wherein cover 190 is wrapped around the collar 154 and the strip of Velcro® or the like material 196 on flap 194 is pressed against the strip of Velcro® or the like material 198 on the top panel 110 of bag 100.

As shown in FIGURES 5-7, the bag or pack 100 is adapted to be mounted to the back of a wearer and suspended from both shoulders of the wearer by means of the shoulder suspension assembly 118 associated with the bag 100.

As is well known in the art, the weight of the contents of bags which are carried in an over-the-back relationship are currently entirely supported by the pack's shoulder straps which, of course, causes all of the weight of the contents of the pack to be suspended from and concentrated in the shoulders and upper back of the wearer of the pack as shown in FIGURE 5 in which the shoulder straps of the prior art pack are shown in their "taut" weight supporting condition.

This, of course, places an undue amount of stress on the shoulders and the upper back of the user/wearer of the bag and often results in injuries to the shoulders and back particularly where the weight of the items carried in the bag is disproportionate to the strength of the shoulders and/or back of the user.

It is also known that the waist and/or hips are better suited than the shoulders and/or upper back from a physical, structural and location standpoint for supporting and/or carrying the weight of a bag or other article in an over-the-back relationship. The present invention advantageously recognizes the increased strength of the waist and/or hips of a user and causes the weight of the bag 100, and the contents stored in the interior thereof, to be transferred and redistributed from the shoulder straps and pads thereof to the waist/hip support member 152 and, more particularly, the arms 156 and 158 thereof. This is reflected in FIGURES 6 and 7 where the arms 156 and 158 of the member 152 are shown in their flexed, engaged positions against the respective sides of the waist and hips of the wearer and the shoulder straps and pads of shoulder suspension assembly 118 are shown in their "slackened" or "loose" weight redistribution condition.

This, of course, advantageously reduces the shoulder and upper back stresses and injuries which users and wearers of standard back packs have experienced. According to the invention, a majority of the weight of the bag 100 and its contents is thus advantageously reconcentrated and redistributed through the member 152 from the shoulders and upper back of the wearer to the hips and/or waist and lower back of the wearer.

Suspension of the bag 100 in an over-the-back relationship from both shoulders using the strap assembly 118 of the present invention also advantageously frees the user's hands and arms for carrying other items or performing other functions. This is particularly advantageous for travelers who often times must carry several bags through airports or stations. Although not shown in any of the drawings, it is understood that center strap 128 of strap assembly 118 can be disconnected from the handle 116 of bag 100 and converted from a double shoulder strap assembly as described earlier to a single shoulder strap assembly where straps 120, 122 and 128 define a continuous single strap which allows the bag 100 to be carried by strap assembly 118 in the customary

over-the-shoulder relationship where bag 100 is suspended from only one of the user's shoulders. It is further understood that center strap 128 of strap assembly 118 may be disconnected from the handle 116 where a user wishes to carry the bag 100 by the handle 116.

In the embodiment shown, bag 100 is adapted to be used or oriented in a first disengaged position (FIGURES 1 and 5) where the arms 156 and 158 thereof are disposed in a generally, up and down vertical position abutted against the front panel 102 of bag 100 and the back and buttocks of the wearer. In the second position as shown in FIGURES 2, 6 and 7, the arms 156 and 158 have been rotated about ninety degrees in the clock-wise direction about the sleeves 148 and 150 formed in the bag 100 (i.e., from the position of FIGURE 4 to the position of FIGURES 6 and 7) to allow the arms 156 and 158 to engage against the respective opposed sides of the waist of the wearer and rest or sit against the top of the hips of the wearer. In this position, the arms 156 and 158 are disposed generally horizontally co-planarly with the top panel 110 of the bag 100 and generally normal with the front panel 102 of bag 100.

Straps 180 and 182 extend between the arms 156 and 158 at one end and a lower longitudinal edge of the outer surface of front panel 102 at the other end and are sized to limit the rotation of arms 156 and 158 to about ninety degrees relative to the front panel 102. A buckle 183 associated with each of the straps 180 and 182 allows the length of each of the straps to be adjusted thus allowing the angle of rotation of the support member 152 relative to the front panel 102 to be adjusted and varied.

In accordance with the present invention, the arms 156 and 158 and, more particularly, the respective arcuate segments 166 of the hip/waist engaging portions 164 thereof, exert an engagement or compressive action or force against the hips and/or waist which cause the weight of the bag 100 and the contents thereof to be transferred away from the shoulders and back of the wearer successively through the bag 100, the collar 154, the arms 156 and 158, and to the hips and/or waist of the wearer.

The width of the member 152 can be adjusted to accommodate differently sized waist and/or hips by adjusting the width between the arms 156 and

158 which, of course, is accomplished by sliding one or both of the extended shoulders 162 of the arms 156 and 158 into locking relationship into whichever of the selected apertures 160 on the collar 154 provide the wearer with the desired width and engaging fit.

Although not shown, it is understood that the invention encompasses embodiments where member 152, and the various other waist/hip members described herein, are permanently secured to the bag 100 in a manner wherein arms 156 and 158 are permanently disposed in the FIGURES 2, 6 and 7 positions generally normal to the front panel 102 of bag 100.

FIGURE 8 depicts an alternate support member embodiment 252 which is identical in all respects to the support member 152 except that the arms 256 and 258 thereof are adapted to be fitted into a collar 254 including a plurality of elongate slots 260 instead of apertures 160 as in the collar 154 of support member 152. The slots 260 in combination with the pins 270 not only secure the arms 256 and 258 to the collar 254 but also are sized to allow the arms 256 and 258 to rotate about ninety degrees relative to the collar 254.

Thus, and although not shown in any of the drawings, it is understood that, in the embodiment where bag 100 incorporates support member 252, collar 254 is adapted to be riveted or otherwise suitably secured directly to the outer surface of the bag 100 instead of being mounted thereon for rotational movement in sleeves associated with to the bag 100 as with the collar 154 of support member 152. Thus, and once suitably secured to the bag 100, the arms 256 and 258 of member 252 would be rotatable about the collar 254 between the FIGURES 5 and 6 positions in the same manner as arms 156 and 158 of support member 152.

FIGURES 9 and 10 depict yet another support member embodiment 352 incorporating arms 356 and 358 identical in shape and structure to arms 156 and 158 of support member 152 and thus the description of arms 156 and 158 is incorporated herein by reference with respect to arms 356 and 358. Collar 354, however, differs from the collar 154 of support member 152 in that collar 354 is in the form of a hollow tubular fitting made of a plastic or the like resilient material and incorporating threaded exterior ends 386 and 388 adapted to receive interiorly

threaded hollow end caps 390 and 392. Hollow compression washers 394 and 396 are fitted within the ends 386 and 388 respectively of collar 354.

In accordance with the present invention, arms 356 and 358 are secured to the collar 354 thereof by extending the respective shoulders 362 thereof through the respective end caps 390 and 392 and then into the respective ends 386 and 388 and into the interior of the collar 354. As shown in FIGURE 10, washers 394 and 396 are located within the interior of collar 354 between the outer surface of the shoulders of arms 356 and 358 and the interior surface of collar 354.

In accordance with the present invention, once the respective shoulders 362 of arms 356 and 358 have been appropriately extended through the respective open ends of collar 354, end caps 390 and 392 are threaded onto the respective ends 386 and 388 respectively of collar 354. FIGURE 10 depicts end cap 390 in its partially threaded relationship over one of the open ends of collar 354 and, for illustration purposes, depicts end cap 392 in its fully threaded relationship over the opposed open end 388 of collar 354. In accordance with the invention, the threading of end caps 390 and 392 over the respective ends of collar 354 causes the respective ends of the collar 354 to contract in size which, in turn, causes the respective washers 394 and 396 to contract and squeeze against the respective shoulders 362 of the arms 356 and 358 respectively thus securing the arms 356 and 358 to the collar 354. Adjusting the width or distance between the arms 356 and 358 requires only the loosening of end caps 390 and 392 followed by the sliding of the shoulders 362 of the respective arms 356 and 358 to the desired position and then subsequently retightening the end caps 390 and 392.

Collar 354 of member 352 is adapted to be slid through a sleeve 348 defined and extending in a generally horizontal relationship along an upper longitudinal edge 344 of the front panel 302 and flap 314 of the bag 300. In the embodiment shown in FIGURE 9, sleeve 348 is defined by a pair of generally vertically oriented spaced-apart slits 346 which are cut through the material comprising the panel 302 so as to define a generally horizontally oriented through aperture in the flap 314 through which collar 354 is received.

Collar 354 and thus support member 352 is rotatable about the sleeve 348 and the outer surface of the front panel 302 in the same manner as the

support member 152 on bag 100 and thus the description thereof is incorporated herein by reference. Alternatively, it is understood that the invention encompasses the embodiment wherein collar 354 is riveted or otherwise suitably secured along the edge 344 of bag 300 and the arms 350 and 358 are rotated about collar 354 by loosening and then subsequently retightening the end caps 390 and 392. All of the other elements and parts of bag 300 such as, for example, the strap assembly 318 and arm straps 380 and 382, are the same as the elements and parts of bag 100 and thus the description of such elements and parts and the respective functions thereof is incorporated herein with respect to bag 300.

FIGURES 11 and 12 depict another bag embodiment 400 incorporating yet another alternate support member embodiment in the form of a clip 452 of the type disclosed in my earlier co-pending U.S. Patent Application Serial No. 10/767,475 filed on January 28, 2004, the description of which is incorporated herein by reference.

Clip 452 is an elongate, generally rectangularly shaped bar which may be made of aluminum, steel, plastic, composite or the like suitable rigid and resilient material which has been bent generally in the shape of a "U" or "horseshoe". Clip 452 which, in the embodiment shown, is generally rectangular in vertical cross-section and includes inner and outer vertical side surfaces 470 and 472 respectively and upper and lower horizontal surfaces 474 and 476 respectively, defies a central, generally arcuately shaped base or body or collar portion or segment 454 and a pair of spaced-apart waist and/or hip engaging clip arms 456 and 458 extending generally horizontally co-planarly outwardly from respective opposed curved shoulders 462 in a relationship wherein the inner surfaces 470 of the respective arms 456 and 458 face each other and extend in a generally vertical orientation.

Although not shown in any of the drawings, it is understood that the clip 452 may also take the form of a round, elongate shaft or any other form suitable for providing the functions and intended uses described below in more detail.

In accordance with the present invention, a hollow tube or the like defining a sleeve 448 extends in a generally horizontal relationship along an upper

longitudinal edge 444 of the front panel 402 of the bag 400 in the region of the flap 414 thereon. In the embodiment shown, tube 448 is riveted or otherwise suitably secured to the outer face of the front panel 402 of bag 400.

As shown in FIGURES 11 and 12, sleeve 448 secures the clip 452 to the bag 400 for rotational movement relative thereto and the front panel 402 of bag 400 between disengaged and waist/hip engageable positions in a manner similar to that described earlier with respect to support member 152 and thus the description with respect to support member 152 is incorporated herein by reference.

Clip 452 is secured to bag 400 by extending the same from one of the ends thereof through the interior of tube 448 into the relationship of FIGURES 11 and 12 where the collar 454 of clip 452 extends through sleeve 448 and the arms 456 and 458 extend generally normally outwardly from the collar 454 and the sleeve 448. The inner diameter of sleeve 448 is slightly larger than the width of the bar comprising the clip 452 so as to allow the collar 454 to rotate within the interior of tube 448 between the engageable position of FIGURE 11 where the arms 456 and 458 are disposed in a generally normal relationship relative to the front panel 402 of bag 400 and the disengaged/collapsed position of FIGURE 12 where the arms 456 and 458 have been rotated in a counter-clockwise direction and hang down from the tube 448 in a relationship wherein the arms 456 and 458 and, more particularly, the lower horizontal surface 476 thereof, are rested against the front panel 402 of bag 400.

In an alternative embodiment, collar 454 may be secured directly to the front panel 402 of bag 400 along the edge 444 thereof as by rivets or the like securement means. It is understood of course that, in this embodiment, the arms 456 and 458 would be permanently oriented in their waist/hip engageable positions generally normal to the front panel 402 of bag 400.

A cover 480 is associated with and secured to the front panel 402 of bag 400 and is adapted to be wrapped around and cover the exterior of the tube 448 for cushioning the feel of the tube 448 against the back of the user. Specifically, cover 480 comprises a strip of suitable cushioning material 482 which has one longitudinal edge 484 stitched or otherwise suitably secured to the front panel 402 of the bag 400. The strip 482 defines a flap 486 including an interior surface

having a strip of hook and loop type material 488 such as Velcro® or a like material secured thereto which is adapted to cooperate and be secured to a like strip of hook and loop type material 480 such as Velcro® or the like material which is secured to the surface of the top panel 410 below the handle 416.

Cover 480 is adapted to be rotated in a clockwise direction from a first orientation wherein cover 480 hangs down against the front panel 402 to a second orientation wherein cover 480 is wrapped around the tube 448 and the strip of Velcro® or the like material 488 on flap 486 is pressed against the strip of Velcro® or the like material 490 on the top panel 410 of bag 400.

All of the other elements of bag 400 shown in FIGURES 11 and 12 such as, for example, the strap assembly 418, are the same as those shown and described earlier with respect to bag 100 and thus the description of the structure and function of such elements is incorporated herein by reference.

Clip 452 may be made from any suitable shape memory alloy or the like material and/or shaped or bent in a manner which allows the arms 456 and 458 of clip 452 thereof to flex laterally outwardly away from each other as shown in phantom in FIGURE 11 thus allowing the clip 452 to expand to accommodate differently sized waists and/or hips. It is understood, of course, that once the clip 452 has been expanded and the arms 456 and 458 are engaged against the waist and/or hips of the user, the arms 456 and 458 will, as a result of their shape memory or bent construction, tend to flex or contract back towards each other thus resulting in the application of an engagement or compressive spring action or force against the waist and/or hips of the user which further enhances the weight transfer and support characteristics of the support member of the present invention.

FIGURES 13 and 14 depict yet a further bag embodiment 500 which incorporates an alternate flexible core support member embodiment 552 similar in structure and function to the flexible core support member disclosed in my co-pending U.S. Application Serial No. 10/767,482 filed on January 28, 2004, the description of which is incorporated herein by reference.

Particularly, support member 552 is in the form of a rod 548 or the like which may be made of any suitable material such as, for example, a flexible core or the like material which allows the rod 548 to be manually manipulated into

any one of several positions, configurations and shapes and which is further adapted to retain such position, configuration or shape when the rod 548 is manually released such as, for example, the released collapsed position and configuration of FIGURE 13 where the arms 556 and 558 defined by the rod 548 have been folded and crossed inwardly against each other and extend generally horizontally across the surface of the front panel 502 of bag 500. Particularly, as another example, rod 548 is manipulable and bendable from the collapsed configuration of FIGURE 13 into the configuration of FIGURE 14 to define a generally "U" or "horseshoe" shaped rod defining a central, generally arcuately shaped base, body or collar portion or segment 554 and a pair of spaced-apart waist and/or hip engaging flexible arms 556 and 558 extending generally horizontally co-planarly outwardly from the sleeve 548.

In accordance with the present invention, rod 546 is adapted to be slid through an elongate hollow generally horizontally oriented open sleeve 550 defined along the upper longitudinal edge 544 of the front panel 502 of bag 500. In the embodiment shown, open or hollow sleeve 548 is defined by a pair of spaced-apart vertical slits 546 cut through the material comprising the front panel 502 of bag 500.

Rod 548 is secured to the bag 500 in a relationship wherein the collar 554 thereof extends generally horizontally and longitudinally through the sleeve 550 defined in the flap 514 of bag 500 and the arms 556 and 558 protrude outwardly out of the sleeve 550. Rivets 590 or the like extend through the collar 554 and into the material comprising the flap 514 and front panel 502 of bag 500 for securing the support member 552 to bag 500.

All of the other elements of bag 500 shown in FIGURES 13 and 14 such as, for example, the strap assembly 518 and arm straps 580 and 582, are the same as the elements of bag 100 shown in FIGURE 1 and thus the description of the structure and function of such elements is incorporated herein by reference.

It will be readily apparent from the foregoing detailed description of the invention and from the illustrations thereof that numerous variations and modifications may be effected without departing from the true spirit and scope of the novel concepts or principles of this invention.